1. A method comprising:

forming a film including diamond and non-diamond forms of carbon; and

gasifying carbon to increase the porosity of the film.

2. The method of claim 1 including forming a film of Sp2 and Sp3 carbon.

3. The method of claim 1 including using chemical vapor deposition to deposit said film.

4. The method of claim 1 including forming a film with a mixture of hydrocarbon and a super saturation of hydrogen.

5. The method of claim 4 including adjusting the ratio of hydrocarbon to hydrogen to form a film with both Sp2 and Sp3 bonded carbon.

6. The method of claim 5 including using 10 to 20 percent methane in hydrogen to form Sp2 and Sp3 bonded carbon.

7. The method of claim 1 wherein gasifying carbon includes exposing the film to oxygen plasma.

8. The method of claim 7 including exposing said film to a plasma without bias.

9. The method of claim 8 including exposing said film to plasma attack from the sides of the film while covering the top of the film.

10. The method of claim 1 including forming said film having a dielectric constant less than 2.

11. The method of claim 1 including forming said film having a porosity of about 50 percent.

12. A method comprising:

forming a semiconductor film comprising significant amounts of both Sp3 and Sp2 bonded carbon.

13. The method of claim 12 including gasifying the Sp2 carbon to increase the porosity of the film.

14. The method of claim 12 including gasifying said Sp2 film by exposing said film to oxygen plasma.

15. The method of claim 14 including exposing said film to oxygen plasma while the top of said film is covered and the sides of said film are exposed.

16. The method of claim 12 including forming said film with a dielectric constant less than 2.

17. The method of claim 12 including forming said film having a porosity of about 50 percent.

18. A semiconductor structure comprising:

a substrate; and

a film on said substrate, said film including diamond and having a dielectric constant less than 2.

19. The structure of claim 18 wherein said film has a porosity of about 50 percent.

20. The structure of claim 18 including a metallic layer over said film.

21. The structure of claim 20 wherein said metallic layer includes copper.

22. A semiconductor structure comprising:

a substrate; and

a film containing significant amounts of Sp2 and Sp3 bonded carbon.

23. The structure of claim 22 wherein said Sp3 bonded carbon is diamond and said Sp2 bonded carbon includes graphite.

24. The structure of claim 22 including a hard mask over said film.

25. The structure of claim 24 wherein said film is etched in a pattern.

26. A semiconductor structure comprising:

a substrate; and

a film containing diamond and non-diamond forms of carbon in significant amounts.

27. The structure of claim 22 wherein said non-carbon diamond includes graphite.

28. The structure of claim 22 formed over a semiconductor substrate.